United States Department of the Interior

FISH AND WILDLIFE SERVICE
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OCT 30 2015

MEMORANDUM

To: Theresa Olson, Acting Bay-Delta Conservation Plan Program Manager, Bureau of Reclamation

From: Acting Field Supervisor, Bay-Delta Fish and Wildlife Office, Sacramento, California

Subject: U.S. Fish and Wildlife Service's Feedback on the BayDelta Conservation Plan/California Waterfix partially Recirculated Draft Environmental Impact Report/Supplemental Draft environmental Impact Statement.

Thank you for giving us the opportunity to provide feedback on the Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS).

Our ability to provide feedback in our role as a Cooperating Agency was limited by competing priorities and a current focus on work associated with the California Water Fix (CWF) Section 7 process, Water Year 2015 drought-associated workload, and Water Year 2016 drought planning. Therefore the comments we are submitting are mostly general in nature. Also given the volume of material to review and resource limits during the available timeframe, we were not able to provide a thorough review of the complete document.

Specific comments on the draft SDEIS are included in the attached file.

We also want to reiterate that we would hope that Reclamation and DWR will fully incorporate in the Final EIS any outstanding relevant comments that the Service has made previously (e.g. comments specific to the EIS/EIR, including those made in our June 11, April 22, and March 24 of 2015 communications; comments made in July of 2013; as well as in our comments from April 2013 and April 2012).

Below are General Comments that flag concerns related to the sufficiency and adequacy of the public draft SDEIS for the Bay Delta Conservation Plan/California Water Fix.

1) Reclamation should ensure that the SDEIS, in its final form, will accurately represent the project description and analyses in the biological assessment (BA) for the CWF Section 7 consultation for which the US Fish and Wildlife Service is currently providing technical assistance.

Examples include:

a. The October 1, 2015 draft CWF BA project description includes modified mitigation/compensation measures that, if included at the time of formal consultation, should also be included in the final EIS/EIR.
b. The final EIS/EIR project footprint descriptions should be consistent with language in the final CWF BA.
c. We suggest that the final EIS/EIR use the CWF BA Section 7 Proposed Action simulation to represent Alternative 4A's operations and to evaluate their effects.

2) The final EIS/EIR should include a full disclosure of the impacts of truck traffic on the Stone Lakes National Wildlife Refuge (SLNWR) including wildlife, visitor experience (aesthetics) and safety (accident analysis) as well as those measures to be adopted and implemented to mitigate those environmental impacts. Attached are revised comments on the effects of truck traffic associated with construction of the Proposed Project on the SLNWR, as well as recommended mitigation measures to be implemented to offset substantial effects. We recommend that the Record of Decision identify those mitigation measures we have proposed as being incorporated into Reclamation's proposed action.

3) For the purposes of NEPA we suggest that the terminology *environmental commitments* be changed to *mitigation*.

FWS Review of the BDCP/CWF July2015 RDEIR/SDEIS 10/30/2015

0_ExecSumm.pdf

- ES.2.3 p.ES-19 line 12 - Is "5D" supposed to be "5A"?
- ES.2.3 p.ES-20 line 12 - Is "replace" supposed to be "supplement"?
- ES.2.3 p.ES-20 line 38 - Please replace "E:I ratio" with San Joaquin River Inflow-to-Exports ratio" to be clear.
- ES.3.1.1.2 p.ES-22 line 14 – This text, "Updated reservoir carryover storage for the Existing Conditions baseline." appears to refer to changes made for Sec7 modeling (which didn't even resimulate Existing Conditions) – which is not discussed anywhere else in this document. Please clarify with elaboration or delete.
- ES.1.4.2 pES-12 lines 15-22 – Are the analyses discussed here based on the reasonably applicable modified H3 and H4 simulations (reruns without 25,000 acres of restoration, with the EMM standard returned to Emmaton and no Fremont Weir described in Appendix B as sensitivity runs)? The modified simulations' results would seem to form a much more reasonable basis for comparisons than the original H3 and H4 results. The impact analyses alluded to here should use the more representative modified H3 and H4 simulation results, not the less representative original H3 and H4 simulation results. Alternatively, this section of the Executive Summary would be a perfect spot to provide the rational for using the old modeling in the impact analyses, if that is what was done.

4_New_Alternatives.pdf

- Table 4.1-2 Marked improvement in clarity.
- Table 4.1-2, p.4.1-7 North Delta operations – Third Column: The author should disclose that the modeling did NOT include the May-protection proviso for pre-Dec 1st pulses. CM1 criteria as proposed in the Draft BDCP has the same disconnect.
- Table 4.1-2, p.4.1-8 South Delta operations: The author should explicitly indicate what "average" means. The intent is to use the same definitions used in current implementation of the existing BiOps' RPA actions, even though the modeling generally uses monthly values.
- Table 4.1-2, p.4.1-8 South Delta operations – Third Column: The author could add "To compute a Dec monthly allowable OMR requirement, the balance of days were assumed to have an OMR flow as low as -8000 cfs."
- Table 4.1-2, p.4.1-8 South Delta operations: Feb & Mar using forecast frequency consistent with current practices most likely means 90% exceedance which would be expected to low ball protections compared to modeling.
- Table 4.1-2, p.4.1-8 South Delta operations: March text needs an "s" on "dry year"
- Table 4.1-2, p.4.1-9 Spring outflow: Please indicate the Alternative's nature, i.e., to have the Mar-May average delta outflow closely approximate the NAA's to prevent the Alternative from degrading longfin smelt abundance relative to the NAA condition at ELT.
- Table 4.1-2, p.4.1-9 Spring outflow – Third Column: The Oroville component is no longer envisioned as necessary. The author should clarify that the text here only applies to the old modeling used for the range-of-effects analysis of Alt 4A.
- Table 4.1-2, p.4.1-10 Export to inflow ratio – Second Column, First Bullet: The author should replace "Operation criteria" with "Monthly ratios" to more precisely indicate what of D-1641 is being retained.
- Table 4.1-2, p.4.1-10 Export to inflow ratio – Second Column, Second Bullet: A full reading of the foundational material for the genesis of the E/I standard indicates south Delta entrainment was a primary purpose, but not the only purpose of E/I. The text should be softened to reflect that.

- Top section - Application of Flow Criteria, p.4.1-11: The water-year type based criteria in Table 4.1-2 are constrained using the frequency of yeartypes projected to exist at the ELT, NOT observed hydrologic conditions. A discussion of the difference ought to be included here.
- Section 4.2.4, p.4.2-3, first bullet and Section 4.2.5, p.4.2-12, first bullet – The author may want to start the sentence with "General effects" since the referenced DEIR/EIS sections contains generalities and then specifics for only the LLT condition.
- Section 4.3 p.4.3.1-1 – p.4.3.26-7 and Section 4.3.4 p.4.3.4-1, lines 24-25 –. In the final EIS/EIR, the past modeling results and impact analyses based on Alternative 4 H3 and H4 referenced in these sections (and anywhere else Alternative 4A is being discussed) should be replaced with modeling results and impact analyses done for/based on the Section 7 BA project description.
- Section 4.3.4 p.4.3.4-1, lines 18-23 – Why isn't the relocation of the EMM water quality standard back from Three Mile Slough to Emmaton not listed here?

Ap_B_Supp Alt.pdf

Appendix B Section B.1.4 p.B-3 – The list of parameters presented is too short. Results for more delta parameters, e.g., Emmaton EC, residence time, etc should be included to fully disclose the adequacy of the H3 and H4 simulations to represent ALT 4A conditions.

BDCP/CWF SDEIS
Stone Lakes NWR Comments
October 30, 2015

Comments on the Effects of Truck Traffic Associated with the Proposed Project on the Stone Lakes National Wildlife Refuge Area

The Stone Lakes National Wildlife Refuge is a part of a national network of lands managed by the U. S. Fish and Wildlife Service. These lands, which total over 95 million acres, are the only public lands with a mandate to provide habitat for this nation's fish and wildlife populations for the continuing benefit of the American people (Fish and Wildlife Act of 1956). This Refuge was established in 1994 with a goal of protecting 18,000 acres of habitat which would link with Cosumnes River Preserve providing a contiguous corridor of habitat for the migration and movement of hundreds of wildlife species including a number of threatened and endangered state and federally listed species.

The Stone Lakes National Wildlife Refuge (Refuge) was established in 1994 under the following authorities: Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901(b)), Fish and Wildlife Act of 1956 (16 U.S.C. 742f(a)(4)), Migratory Bird Conservation Act (16 U.S.C. 715d), and Endangered Species Act of 1973 (16 U.S.C. 1534). Furthermore, the Refuge System Improvement Act of 1997 (Public Law 105-57) directs the U.S. Fish and Wildlife Service (Service) to manage each refuge to fulfill the mission of the Refuge System, as well as the specific purposes for which that refuge was established. Refuge purposes are critical to determining the compatibility of all existing and proposed refuge uses.

Additional acquisition authorities can be found in the funding sources used to acquire and restore land. These sources include: the California Environmental License Plate Fund, the Cigarette and Tobacco Product Surtax (California Proposition 99, 1988), the North American Wetland Conservation Act (16 U.S.C. 4401-4412), the Land and Water Conservation Fund (16 USC 460l - 460l-11), the Sacramento County Environmental Mitigation Grant/Packard Foundation, the Central Valley Improvement Act (16 U.S.C 695d-695j), the National Fish and Wildlife Fund (16 U.S.C. 3701-3709), the Trust for Public Land Grant/Packard Foundation, the City of Sacramento, and CalFed Bay Delta Program.

The purpose for which the Refuge was established includes the following:

"... for the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions ..." (Emergency Wetlands Resources Act of 1986)

"... for the development, advancement, management, conservation, and protection of fish and wildlife resources ..." (Fish and Wildlife Act of 1956)

"... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ..." (Fish and Wildlife Act of 1956)

"... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.'(Migratory Bird Conservation Act of 1929)

"... to conserve (A) fish or wildlife which are listed as endangered species or threatened species .... or (B) plants ...@ (Endangered Species Act of 1973)

The Refuge exemplifies the power of partnerships working together to protect an important resource. Today, over 6,000 acres have been restored and are managed for wildlife, with over 24 million of taxpayer dollars having been invested in the Refuge. Recently the Refuge was able to purchase property that now provides an important link to the Cosumnes River Preserve and the Delta. This investment has had spectacular results with over 200 species of birds, many of which were extirpated from the area, now wintering and breeding in the area. Restoration of wetland, riparian corridors and grassland habitats now support over 150,000 wintering waterfowl, shorebirds and cranes.

The BDCP proposes to construct two tunnels along the Sacramento River to convey water south. The project is in close proximity to the Refuge and will be impacted by it in a number of ways. One impact that is of great concern is the increase in traffic on roads that bisect the Refuge. According to the report, traffic will increase 10 fold, with a vehicle passing by the Refuge every 5 seconds from 6 am to 7 pm for the next 7-10 years.

This increase in traffic will have negative effects on 1) wildlife populations; 2) visitor experience; and 3) safety of staff, cooperators, and visitors on roads including Hood-Franklin Road, Lambert Road, Twin Cities Road and River Road, impacting the ability of the Refuge to meet the purposes for which it was established (Fish and Wildlife Act of 1956, Refuge System Improvement Act 1997. The issues associated with the increase in traffic are not adequately addressed in the document. Furthermore, the condition of Hood-Franklin Road from Interstate 5 to SR 160 and Lambert Road from Herzog Road to Franklin Blvd are listed as "Deficient". These roads can still be used based on mitigation measures 1b and 1c, yet impacts to the Refuge are not listed nor addressed in any mitigation measures.

Wildlife Impacts

Roads and high traffic volumes reduce landscape connectivity which affects wildlife populations in the following ways:

- Roads and traffic limit the regular movement of animals to different habitats (e.g. wetland to grassland) to meet daily, seasonal, and basic biological needs such as reproduction, feeding, and sheltering.
- Roads and traffic affect use of habitats adjacent to roadways with some species having a higher degree of aversion to traffic and associated noise.
- Roads and traffic limit the ability for areas to be recolonized, and ability of young to find and establish new territories.
- Roads and traffic increase wildlife mortality due to collisions, which can affect reproduction success. At sufficiently high rates of mortality, areas become population sinks, which can then affect regional populations.

Significant increases in traffic volume that bisect habitat can affect the ability for the Refuge to meet its federal mandates and purposes for establishment. Impacts to landscape connectivity are evident along the east side of the Refuge which is bordered by Interstate 5. The increase in volume of traffic since its construction in the late 1970's has affected a wide variety of animal species which is evident by the number of carcasses Refuge staff observes on a weekly basis along the roadway. For example, barn owls are regularly found dead from collisions along the roadway. From April to September of 2015, 10 barn owl carcasses were observed along the 3.8 mile stretch of freeway from Laguna Blvd to Hood-Franklin Road. The number of collisions has been increasing over the years, as habitat conditions improve and the birds fly across Interstate 5 to access foraging areas. Additional species killed along Hood-Franklin and Lambert Road include: gopher, garter and king snakes, Western meadowlark, red winged blackbird, western pond turtle, rabbit, opossum, striped skunk, coyote, American coot and unidentified ducks. River otter are another species that have been killed along roadways as individuals follow drainages from lakes to seasonal waterbodies.

The harmful effects of an increase in traffic underscore the need to maintain and restore essential movements of wildlife across roads to maintain population movements and genetic interchange. This is particularly important on roads with high traffic volumes that can become complete barriers to movement. Numerous studies show that high-volume and high-speed roads tend to be the greatest barriers and most effective in disrupting animal movements and population interchange, therefore mitigation measures must be put in place to offset the increase in traffic on roads bisecting the Refuge as part of the BDCP.

There are many tools and approaches that can be used to reduce animal-vehicle collisions and provide habitat connectivity for wildlife across highways. These mitigation measures include modifying traffic and/or driver behavior; modifying animal behavior or population size using minimal infrastructure; and physically separating or modifying animal behavior using substantial infrastructure.

The optimal Mitigation Measure to offset the truck traffic impacts to the Refuge would be to:

- Avoid use of Hood-Franklin and Lambert Roads between Franklin Road and SR160.

If the above Mitigation Measure is infeasible the following Mitigation Measures to be implemented include:

- Purchase land or easements in strategic locations adjacent to the Refuge with no barriers to connectivity to offset losses of habitat and connectivity.
- Reduce volume of traffic allowed to utilize Hood-Franklin and Lambert Roads
- Limit travel times to avoid dusk and dawn when some species are most active
- Implement AMM20 3.C.2.20.1.4 Measures to Avoid and Minimize Potential Effects from Lighting and Visual Disturbance including no traffic on Hood-Franklin Road one hour before sunset to one hour after sunrise to limit disturbance to greater sandhill crane roost site and route truck traffic.

- Implement AMMO 3.C.2.20.1.4 Measures to Avoid and Minimize Potential Effects from Lighting and Visual Disturbance: Route truck traffic to reduce headlight impacts in roosting habitat
- Implement lower speed limit (<45 mph)
- Limit the time of the day of increased traffic volumes which is currently 6am-7pm
- Construct wildlife crossing tunnels and fence barriers
- Signage to inform public and drivers of hazards

All but the first mitigation measure address the immediate impact to the Refuge. The general increase in traffic volume on all roads surrounding the Refuge is only addressed by creating and protecting additional habitat at a landscape level in and around the Refuge.

Visitor Experience

The Refuge Improvement Act of 1997defines the priority public uses, "the Big Six" that all refuges should accommodate given adequate funding, personnel and property. The following public uses are provided at the Refuge: hunting, wildlife observation, wildlife photography, environmental education, and environmental interpretation. Investments for these wildlife dependent activities public uses are estimated at over 10 million. Thus the Refuge not only has federal mandates to provide these uses, but also has invested significant tax payer dollars.

In 2010, the U.S. Fish and Wildlife Service constructed a visitor contact station behind the office on Hood-Franklin Road which includes a parking area, restroom, universally accessible trails, informational kiosks, playscape, and amphitheatre for the visiting public. Again, this infrastructure was built to fulfill the purposes of the Refuge as defined in the Refuge Improvement Act of 1997 and Fish and Wildlife Act of 1956. This area is now used by over 30,000 visitors annually that come for a quiet experience to explore the restored wetlands, riparian and grassland habitats and associated wildlife. Over 2,000 school children also visit this area to experience nature, and take part in the Refuge's environmental education programs with hands on learning such as plantings, wildlife observation, and art projects. The site also hosts a variety of events each year with surges of attendance that fill the primary and alternate parking lots.

This visitor experience will be impacted by the increase in traffic and noise on Hood-Franklin Road, necessitating the inclusion of a variety of mitigation measures to ensure the continued use of this valuable resource as mandated by federal law that guides the management of the Refuge under the umbrella of the Refuge Improvement Act of 1997.

Mitigation measures to be implemented include:

- Construction of additional turn pocket at main entrance to the Headquarters Unit.
- Re-route traffic to another road
- Implement lower speed limits (45 mph maximum) near the Refuge Headquarters Unit
- Limit the time of the day of increased traffic volumes which is currently 6am-7pm
- Limit the days trucks may use roads accessing the Refuge (none Friday-Sunday)
- Implement litter control program

- Education for personnel not to use facilities at Refuge Headquarters
- Signage to inform public of entrance and egress roadway into Headquarters
- Vegetation screen along road visible to public
- Noise reduction program
- Control dust and debris that may escape from truck trailers
- Consider other methods for transporting materials and supplies that does not impact current road conditions and traffic volume (barge, rail, tunnel).
- Minimize truck traffic seasonally on Hood Franklin Road during the high use periods at the Refuge VCS from October to May

Safety

Safety is of the utmost importance when bringing the public to the Refuge. Furthermore Refuge staff, volunteers, partners, contractors and cooperators utilize Refuge roads to access public use areas, travel between Refuge management units, and move equipment such as tractors, and boats, cattle trucks, etc. An increase in the volume of traffic on all roads will impact the safety of ingress and egress onto Refuge roads from affected public roads including Hood-Franklin Road, Lambert Road, and the River Road.

In 2005, a waterfowl hunting program was established at the Sun River Unit of the Refuge. Hunters enter the Sun River Unit from Lambert Road, arriving between 4 and 5 am and leaving between 11 and 2 pm on Wednesdays and Saturdays during the months of October through January. The entrance road has poor visibility in both directions because Lambert Road dips down for approximately 2000 LF at the bridge. An increase in traffic associated with the project will significantly increase the ingress and egress hazards on the road, underscoring the need for mitigation measures that must be put in place.

Mitigation measures to be implemented include:

- Design and build new entrance to Sun River Unit
- Design and build turn pockets on Lambert Road at the entrance to the Sun River Unit
- Re-route traffic to another road
- Implement lower speed limits near the Sun River Unit
- Limit the time of the day of increased traffic volumes which is currently 6am-7pm
- Signage to inform public of entrance and egress roadway into Sun River Unit

The main entrance to the Refuge Visitor Contact Station (VCS) located off Hood-Franklin Road is used by over 30,000 visits per year, and the Refuge annually hosts over 2,000 students and education professionals conducting environmental education and service learning programs. The Elk Grove Unified School District has selected the Refuge VCS as a safe site to send students to participate in field activities. The Friends of Stone Lakes NWR annually hosts the local Nature Bowl competition with California Department of Fish & Wildlife and provides buses for underfunded schools. Mitigation measures must be implemented to ensure the safety of staff, volunteers and cooperators working in and around the Refuge. The Mitigation Measures listed above need to be implemented to address these issues.